

Appln. No. 09/746,713
Amendment dated November 22, 2005
Reply to Advisory Action of July 25, 2005

Amendments to the Claims:

Please amend claim 16 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-15 (Cancelled).

Claim 16 (Currently Amended). A laser scanning microscope comprising:

a pulse laser unit configured to oscillate a pulse laser beam to excite a sample;

5 a scanning mirror configured to scan the pulse laser beam;

a photodetector configured to detect light from the sample and output an analog detection signal;

a sampling control circuit which receives a pulse oscillation signal from the pulse laser unit and generates a trigger signal delayed by a predetermined time;

10 a pulse generator which receives the trigger signal and generates sampling pulse signals for each trigger signal for a predetermined output period required for data acquisition only,

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15 wherein the sampling pulse signals are generated during the
predetermined output period to obtain a fluorescent decay curve
with one excitation of a fluorescent signal;

an A/D converter which converts the analog detection signal
from the photodetector to digital data in synchronism with each
of the sampling pulse signals; [[and]]

20 a memory which stores the digital data provided by the A/D
converter; and

an image display unit which reads the digital data from the
memory and displays the read digital data as an image in
synchronism with each scanned position by the laser beam.

Claim 17 (Previously Presented). The laser scanning
microscope according to claim 16, wherein digital integration of
the fluorescent signal is performed using the digital data stored
in the memory.

Claim 18 (Previously Presented). The laser scanning
microscope according to claim 16, wherein analysis is performed
to detect a peak of the fluorescent signal using the digital data
stored in the memory.

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Claim 19 (Previously Presented). The laser scanning microscope according to claim 16, wherein analysis is performed to determine a time constant of the fluorescent signal using the digital data stored in the memory.

Claim 20 (Previously Presented). The laser scanning microscope according to claim 16, wherein the predetermined output is less than 10 nsec.